

REMARKS

The present invention relates to an inline process for controlling and monitoring a nitration process. In this process, the composition of the acid phase from a nitration reaction mixture is determined spectrometrically. The data from this determination is then relayed to a process control system in order to monitor and control the production process.

Claim 11 was objected to on the basis that it depended from process Claim 8 rather than a product claim. Claim 11 has been amended to make it depend from product Claim 10. It is believed that this amendment removes the basis for this objection.

Withdrawal of this objection is therefore requested.

Claims 8-9 and 17-19 were objected to under 37 C.F.R. 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim.

Each of Claims 8, 9, 17, 18 and 19 has been amended to delete the reference to a preceding multiple dependent claim. New Claims 20-24 have been added to claim the subject matter removed from the amended claims. It is believed that these amendments remove the basis for this objection.

Withdrawal of this objection is therefore requested.

Claim 7 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The specific basis for this rejection was that the process steps were unclear as to which steps are taken after each supply.

Claim 7 has been amended to more clearly recite the process steps. It is believed that this amendment removes the basis for this rejection.

Withdrawal of this rejection is therefore requested.

Claims 1-6 and 10-16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over McDonald et al (U.S. Patent 6,072,576) in view of Wilson et al (U.S. Patent 6,561,010). Applicants respectfully traverse this rejection.

McDonald et al discloses a method for on-line control of a chemical process plant in which the adjustments to the chemical process are made on the basis of a program which "predicts" the processing criteria necessary to obtain the desired product properties on the basis of a model generated from data collected from previously produced materials which data is corrected for measurement errors.

Applicants' claimed process does not, however, use such a predictive program. Rather, in Applicants' process, any necessary adjustments are made on the basis of an actual spectrometric analysis of the acid phase the composition of which will be adjusted, if necessary, on the basis of such analysis.

Wilson et al discloses an apparatus and method for fluid analysis in which at least one meter is placed near the process line for the purpose of analyzing a fluid used in an industrial process line and the results of this analysis are made available to a remote observer.

Wilson et al does not teach or suggest spectrometric measurement of any composition in a manner such that a reaction mixture composition could be adjusted to replace a depleted material such as nitric acid in only the necessary amount. Applicants' claimed process requires such spectrometric measurement.

Applicants maintain that even if one skilled in the art were to attempt to combine the teachings of McDonald et al and Wilson et al, he/she would not "arrive at" Applicants' claimed process.

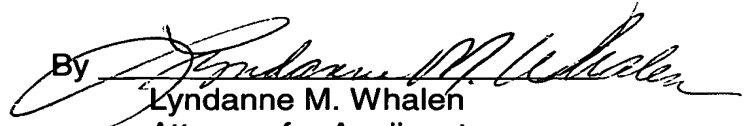
More specifically, McDonald et al employs a predictive model to adjust the disclosed processes. Wilson et al does not disclose any method for spectrometrically measuring the composition of any portion of a reaction mixture much less an acid phase of a nitration mixture. One skilled in the art combining the teachings of these references would therefore "arrive at" a process which required a predictive model.

Applicants' process which requires actual spectrometric measurement rather than a prediction made on the basis of a model derived from past processes is not therefore rendered obvious by the combined teachings of McDonald et al and Wilson et al.

Withdrawal of this rejection is therefore requested.

In view of the above amendments and remarks, reconsideration of Claims 1-19 and allowance of Claims 1-24 are respectfully requested.

Respectfully submitted,

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